

REMARKS

Claims 1-5, 8-12 and 14-23 are pending in the present application. By this Amendment, previously presented claims 1, 3, 8, 15 and 20 have been amended; previously presented claims 6-7 have been canceled; and new claims 22-23 have been added. Applicants respectfully request reconsideration of the present claims in view of the foregoing amendment and the following remarks.

I. Prior Art Rejections:

Rejection of Previously Presented Claims 1-12 and 14-21 Under 35 U.S.C. §103(a) In View of U.S. Patent No. 5,620,678 (Burke) Further In View of U.S. Patent No. 6,924,250 (Cernes) and U.S. Patent No. 5,704,961 (Hudson)

Previously presented claims 1-12 and 14-21 were rejected under 35 U.S.C. §103(a) as being unpatentable in view of U.S. Patent No. 5,620,678 issued to Burke (hereinafter, “Burke”) in combination with U.S. Patent No. 6,924,250 issued to Cernes (hereinafter, “Cernes”) and U.S. Patent No. 5,704,961 issued to Hudson (hereinafter, “Hudson”). This rejection is respectfully traversed.

Applicants respectfully submit that one skilled in the art, given the teaching of Burke and a general understanding of the art, would not have been motivated to (1) seek out the teachings of Cernes and Hudson, and (2) subsequently formulate a pesticide concentrate as recited in Applicants’ claimed invention. In particular, one skilled in the art, given the teaching of Burke and a general understanding of the art, would not have been motivated to (1) seek out the teachings of Cernes and Hudson, and (2) subsequently formulate a pesticide concentrate comprising (i) a pesticide comprising mesotrione, an agriculturally acceptable salt of mesotrione or a metal chelate of mesotrione, and (ii) an ionic nitrate salt additive effective in reducing corrosion of metal surfaces, the ionic nitrate salt additive comprising ammonium nitrate, wherein the ratio of the ionic nitrate salt additive to the pesticide is less than or equal to 0.3:1. For at least this reason and the additional reasons provided below, the proposed combination of the teaching of Burke with the teachings of Cernes and Hudson fails to make obvious Applicants’ claimed invention.

The teaching of Burke is directed to water-solvent based aerosol insecticides

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comprising a diluent, at least one active insecticidal ingredient which is insoluble in the diluents, and dimethylether. The disclosed aerosol insecticides may further comprise a co-solvent, such as isopropyl alcohol, and a corrosion inhibitor such as the corrosion inhibitors disclosed in column 2, lines 32-34.

As noted on pages 5 and 6 of the October 01, 2010 Office Action, the teaching of Burke fails to disclose, teach or suggest claim features of Applicants' claimed invention including, but not limited to, (i) a copper or zinc chelate of mesotrione, (ii) Applicants' recited pesticide concentrate, wherein the pesticide concentrate has a pH of 6 or less, and (iii) formulation auxiliaries in the form of an alkali metal salt or an alkaline earth metal chloride. It should be further noted that the teaching of Burke fails to disclose, teach or suggest (i) any mesotrione compound or salt thereof, and especially (ii) a pesticide comprising the combination of (a) mesotrione, an agriculturally acceptable salt of mesotrione or a metal chelate of mesotrione, and (b) an ionic nitrate salt additive effective in reducing corrosion of metal surfaces, the ionic nitrate salt additive comprising ammonium nitrate, wherein the ratio of the ionic nitrate salt additive to the mesotrione pesticide is less than or equal to 0.3:1.

As discussed in Applicants' May 28, 2010 Amendment and Response, the teaching of Cornes is directed to synergistic herbicidal compositions comprising mesotrione and a second herbicide selected from a list of herbicides as shown in column 1, lines 35-52. Although the teaching of Cornes discloses a number of additional components for the synergistic herbicidal compositions, depending on whether the resulting synergistic herbicidal composition is in powder or liquid form, the teaching of Cornes does not disclose, teach or suggest the use of an ionic nitrate salt, and especially ammonium nitrate, in any of the disclosed synergistic herbicidal compositions.

As further discussed in Applicants' May 28, 2010 Amendment and Response, the teaching of Hudson is directed to non-corrosive nitrogen-containing fertilizer solutions comprising specific corrosion inhibitors in the form of monocarboxylic acids, polycarboxylic acids, or mixtures thereof. The teaching of Hudson directs one skilled in the art to utilize the disclosed corrosion inhibitors (i.e., monocarboxylic acids, polycarboxylic acids, or mixtures thereof) in liquid nitrogen-containing fertilizers due to the corrosive nature of nitrogen-

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containing fertilizer components (e.g., ammonia, urea, ammonium nitrate, ammonium sulfate, etc.). See, for example, the “Background of the Invention” section of Hudson. Further, the teaching of Hudson fails to disclose, teach or suggest any liquid fertilizer solutions comprising ammonium nitrate in combination with a pesticide, wherein the ratio of the ammonium nitrate to the pesticide is less than or equal to 0.3:1.

The May 28, 2010 non-final Office Action appears to suggest that one skilled in the art, given the teaching of Burke and the general state of the art, would have (1) sought out the teachings of Cornes and Hudson, and (2) subsequently incorporated (i) mesotrione (or a salt or chelate thereof) from the disclosed synergistic herbicidal compositions of Cornes and (ii) ammonium nitrate from the disclosed nitrogen-containing liquid fertilizers of Hudson into the aerosol insecticide of Burke so as to provide a ratio of the incorporated ammonium nitrate to the incorporated mesotrione (or salt or chelate thereof) of less than or equal to 0.3:1. Applicants disagree.

Applicants respectfully submit that one skilled in the art, given the teaching of Burke and a general understanding of the art, would not have been motivated to combine select components from each of the teachings of Burke, Cornes and Hudson in order to produce Applicants’ claimed pesticide concentrates and compositions. There simply is no suggestion in the art to combine a mesotrione pesticide with a corrosion inhibitor in the form of ammonium nitrate with a ratio of ammonium nitrate to mesotrione pesticide of less than or equal to 0.3:1.

Moreover, Applicants respectfully submit that the proposed combination of the teachings of Burke, Cornes and Hudson actually teaches away from the use of ammonium nitrate as a corrosion inhibitor in a pesticidal composition given that the teaching of Hudson (1) discloses specific corrosion inhibitors in the form of monocarboxylic acids, polycarboxylic acids, or mixtures thereof, as discussed above, and (2) clearly discloses that ammonium nitrate causes corrosion, and due to the corrosive nature of ammonium nitrate, corrosion inhibitors in the form of monocarboxylic acids, polycarboxylic acids, or mixtures thereof should be utilized instead of ammonium nitrate. For at least this reason, Applicants respectfully submit that the proposed combination of select portions of the teaching of Burke with select portions of the teaching of Cornes and the teaching of Hudson is improper.

However, even if the proposed combination of the teaching of Burke directed to aerosol insecticides with the teaching of Cornes directed to synergistic herbicidal compositions and the teaching of Hudson directed to liquid fertilizers is deemed proper (and for at least the reasons provided above, Applicants submit that the proposed combination of divergent references is improper), the proposed combination of the teaching of Burke with the teaching of Cornes and the teaching of Hudson, taken alone or in view of the general state of the art, fails to provide motivation to one skilled in the art to (1) select (i) the mesotrione pesticide from the teaching of Cornes and (ii) the ammonium nitrate from the teaching of Hudson, and (2) formulate an aerosol insecticide, as disclosed in Burke, comprising (i) the mesotrione pesticide from the teaching of Cornes and (ii) the ammonium nitrate from the teaching of Hudson with a ratio of ammonium nitrate to mesotrione pesticide of less than or equal to 0.3:1. Applicants respectfully submit that the only motivation for formulating such an aerosol insecticide, as suggested in the October 01, 2010 non-final Office Action, has been gleaned from Applicants' original specification, not from the art.

Applicants note that in *KSR International Co. v. Teleflex Inc.*, 127 S.Ct. 1727 (2007) (hereinafter, "the *KSR* case") and cases after the *KSR* case, the Court requires some motivation or reason for one skilled in the art to (i) combine elements of the prior art or (ii) modify a known compound in the way that a new invention does in order to render the new invention obvious. See, for example, the Court decision in *Takeda Chem. Indus., Ltd. v. Alphapharm Pty., Ltd.*, No. 2006-1329 (Fed. Cir. 2007) (hereinafter, "the *Takeda* case"), wherein the Federal Circuit stated:

While the KSR Court rejected a rigid application of the teaching, suggestion, or motivation ("TSM") test in an obviousness inquiry, the Court acknowledged the importance of identifying "a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does" in an obviousness determination. KSR, 127 S. Ct. at 1731. Moreover, the Court indicated that there is "no necessary inconsistency between the idea underlying the TSM test and the Graham analysis." Id. As long as the test is not applied as a "rigid and mandatory" formula, that test can provide "helpful insight" to an obviousness inquiry. Id. Thus, in cases involving new chemical compounds, it remains necessary to identify some reason that would have led a chemist to modify a known compound in a particular manner to establish *prima facie* obviousness of a new claimed compound.

Although the holding in the *Takeda* case involved motivation for modifying a known compound, Applicants respectfully submit that a similar analysis applies to the required motivation for selecting and combining possible pesticidal composition components from hundreds (or thousands) of potential pesticidal composition components. As discussed above and consistent with the holdings in the *KSR* case and the *Takeda* case, the art fails to provide any reason that would have lead one skilled in the art to (1) select the mesotrione pesticide from the teaching of Cornes and the ammonium nitrate from the teaching of Hudson, and (2) formulate an aerosol insecticide, as disclosed in Burke, comprising the mesotrione pesticide from the teaching of Cornes and the ammonium nitrate from the teaching of Hudson with a ratio of ammonium nitrate to mesotrione pesticide of less than or equal to 0.3:1.

In addition, Applicants respectfully submit that each of the teachings of Burke, Hudson, and Cornes, as well as the general state of the art, taken alone or in combination with one another, prior to Applicants' present invention, failed to recognize the benefits of utilizing a corrosion inhibitor in the form of an ionic nitrate salt comprising ammonium nitrate within a pesticide concentrate comprising at least one pesticide comprising mesotrione, an agriculturally acceptable salt of mesotrione or a metal chelate of mesotrione, wherein the ammonium nitrate is used at relatively low concentrations. As shown in Applicants' original specification, Applicants were the first to recognize the benefits associated with incorporating a corrosion inhibitor in the form of ammonium nitrate, at a relatively low concentration, into a pesticide concentrate comprising at least one pesticide mesotrione, an agriculturally acceptable salt of mesotrione or a metal chelate of mesotrione.

For at least the reasons given above, it is respectfully submitted that the proposed combination of the teaching of Burke with the teachings of Cornes and Hudson, alone or in combination with the general state of the art, fails to make obvious Applicants' claimed invention as embodied in independent claims 1, 15 and 20. Since claims 2-5, 8-12, 14, 16-19 and 21 depend from independent claims 1, 15 and 20 and recite further claim features (previously presented claims 6-7 have been canceled), the proposed combination of the teaching of the teaching of Burke with the teachings of Cornes and Hudson, alone or in combination with the general state of the art, also fails to make obvious Applicants' claimed invention as embodied in

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dependent claims 2-5, 8-12, 14, 16-19 and 21. Accordingly, withdrawal of this rejection is respectfully requested.

II. New Claims 22-23:

New claims 22-23 are directed to further embodiments of Applicants' claimed invention. Support for new claims 22-23 may be found in at least the following locations of Applicants' original specification: page 6, lines 12-22, and Example 1 (claims 22 and 23).

For reasons similar to those presented above with regard to claims 1-5, 8-12 and 14-21, Applicants submit that new claims 22-23 are allowable over the art of record.

III. Conclusion:

For at least the reasons given above, Applicants submit that claims 1-5, 8-12 and 14-23 define patentable subject matter. Accordingly, Applicants respectfully request allowance of these claims.

Should Examiner Brown believe that further action is necessary to place the application in better condition for allowance, Examiner Brown is respectfully requested to contact Applicants' representative at the telephone number listed below.

No additional fees are believed due; however, the Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, to Deposit Account No. 503025.

Respectfully submitted,
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